



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

AW

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,467	06/23/2003	Brian A. Wims	GP-302957 (2750/30)	7224

7590 05/24/2004

General Motors Corporation
Legal Staff, Mail Code 482-C23-B21
300 Renaissance Center
P.O. Box 300
Detroit, MI 48265-4714

EXAMINER
NGUYEN, TUNG X

ART UNIT
2829

PAPER NUMBER

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,467

Applicant(s)

WIMS ET AL.

Examiner

Tung X Nguyen

Art Unit

2829

mu

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "680" has been used to designate both "*an electronic module*" and "*the mapping box*" recited in page 7. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "*wireless mapping board 510*" recited in pages 5-6. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear that "at least one *mapping board box* including at least one *harness port*" recited in claim 1. Does it show on any drawings? Because of the figures 1, 6 indicate that the electronic modules' box including at least one harness port.

To apply art, examiner assumes that the electronic modules' box including at least one harness port.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 8-9, 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Etemadpour et al. (u.s.p 5,646,522).

As to claim 8, Etemadpour et al disclose in Fig. 3, the method comprising steps of: a circuit board (64, 52) corresponding to an electronic module (66) via pins; and the circuit board (64, 52) inserting into a pre-wired mapping board box (20).

As to claim 9, Etemadpour et al. disclose in Fig. 3, the steps of receiving the pinned portion of the board (64, 52) into connection port (55) in a mapping board box (20)

As to claim 11, Etemadpour et al disclose in Fig. 3, the system for test an electronic module comprising: means (20) for receiving a circuit board (64, 52); means (30, 32, 50) for communicating between the circuit board receiving means (20) and an electronic module (66).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-7, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (heretoafter APA) in Fig. 1, and in view of Etemadpour et al. (u.s.p 5,646,522).

As to claims 1, 5, APA in Fig. 1, a system for testing electronic module comprising: at least one electronic modules' box (cover of 130) including at least one harness port (190); at least one harness with a generic harness (120, cable) operably connected at one end to the at least one harness port (190); APA does not disclose a mapping board box. However, Etemadpour et al discloses in Fig. 3, the mapping board box (20) for pre-wiring and receiving the circuit board (64) with a variety of pin configuration, wherein the mapping board box having a plurality of pin receptors (30, 32) in communication with the electronic modules (66), and the circuit board (64). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system of APA, and providing the mapping board box, as taught by Etemadpour et al for receiving the circuit board (64) with a variety of pin configuration, and easily connecting/removing to the tester while testing the electronic modules.

As to claim 2, Etemadpour et al. disclose in Fig. 3, the dimensions of the at least one mapping board box are sized to fit a printed circuit board.

As to claims 3-4, 6, APA in view of Etemadpour et al disclose all of the limitations except for the at least one harness port comprises 56 pins, and/or the at least one mapping board box comprises 560 pin receptors. It is a well known that the harness port comprising 56 pins and the mapping board box having 560 pin receptors for transmitting and receiving all of kinds data at the same time. However, it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

As to claim 7, APA disclose the system further comprising an electronic simulators (140 of figure 1).

At to claim 10, Etemadpour et al disclose the steps of a circuit (64, 52) and the module (66) communicates via the mapping board box (22) and a harness connection (55).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ercier et al. (5,406,197), and Mayr et al. (6,677,745) both related to testing electronic modules.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung X Nguyen whose telephone number is (571) 272-1967. The examiner can normally be reached on 8:30am-5:00pm M-F.

Art Unit: 2829

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN
5/12/04

David A. Zarnke
David A. Zarnke
Primary Examiner
5/13/04